



73.4 Response
Dkt. 255/040
Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Michael J. Heller et al.

Serial No.: 09/597,866

Filed: June 20, 2000

For: APPARATUS AND METHODS FOR
ACTIVE PROGRAMMABLE MATRIX
DEVICES

)
) Group Art Unit: 1634

)
) Examiner: B. Forman

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RESPONSE AFTER FINAL REJECTION

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Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the final office action dated April 15, 2002 please consider the following remarks.

REMARKS

Rejections under 35 U.S.C. § 102

Claims 1, 2, 4, 7, 9, 13, and 15-17 were rejected under 35 U.S.C. § 102 as being anticipated by Hollis (U.S. Patent No. 5,846,708). According to MPEP § 2131, "to anticipate a claim, the reference must teach every element of the claim." Because Hollis does not disclose

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(37 C.F.R. § 1.8a)

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every element of the claimed invention, it is not anticipatory, and applicants traverse this rejection.

The Hollis reference lacks the permeation layer of the claimed invention. Instead, Hollis discloses a passivating layer, which is used either to protect the electrodes from corrosion or to cover a "glue" layer used to adhere probes to the array. In addition, the Hollis reference discloses that the passivating layer may be made of hydrophobic materials, such that it is impermeable to fluids. In marked contrast, the permeation layer of the claimed invention prevents large charged entities, such as DNA, from contacting the underlying electrode, but permits the transport of small charged entities through it. (See page 16, lines 35-36 and page 17, lines 1-7.)

Furthermore, the novelty of the permeation layer of the present invention has been key in a number of claims examined by Dr. Marschel, including those in application no. 08/146,504, to which applicants claim priority. Because the Hollis reference does not disclose each and every element of the claimed invention, applicants ask that this rejection be reconsidered and withdrawn.

Rejections under 35 U.S.C. § 103

In addition, claims 8 and 18 were rejected as being obvious under Hollis either by itself or in combination with Ebersole (U.S. Patent No. 5,658,732). To establish a *prima facie* case of obviousness, "the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP § 2142, "Establishing a *prima facie* case of obviousness." Therefore, applicants traverse this rejection as neither Hollis by itself nor in combination with Ebersole discloses each and every limitation of the claimed invention.

Specifically, it was asserted that claim 8 is obvious over Hollis taken in view of Ebersole. This combination of references does not establish a *prima facie* case of obviousness with regard

to the claimed invention. It was asserted that in light of Ebersole it would have been obvious to one of skill in the art to "minimize the small volumes in the apparatus of Hollis et al. and using routine experimentation determine the minimal volumes e.g. 5 to 10 microliters..." It is not necessary to discuss the merits of this assertion because the Ebersole reference does not remedy the deficiencies of the Hollis reference described above. In particular, the Ebersole reference does not disclose the permeation layer of the present invention. Therefore, the above combination does not disclose each and every limitation of the invention of the present application, and applicants ask that this rejection be reconsidered and withdrawn.

In addition, claim 18 was rejected based on the assertion that "it would have been obvious to one of skill in the art...that the epoxide of Hollis et al comprise the claimed property of light resistance." It is not necessary to discuss the merits of this assertion because, as discussed above, Hollis does not disclose the permeation layer of the present invention. Because Hollis does not disclose each and every limitation of the present invention, applicants ask that this rejection be reconsidered and withdrawn.

Based upon the foregoing amendments and remarks, applicants respectfully submit that the application is now in condition for allowance. Any fees required by this submission may be charged to deposit account 12-2475. If the Examiner has any questions regarding this communication, or feels that an interview might facilitate prosecution of the application, he is invited to contact the undersigned at (949) 567-2300.

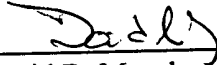
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Respectfully submitted,

LYON & LYON LLP

Dated: July 15, 2002

By: _____


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